Division Meeting Seismology

P. Martin Mai (sm@egu.eu)

General Assembly 2016 | Wednesday, April 20



Seismology Vision





Agenda & Topics

- Welcome
- Awards
- Structure of the Seismology Division
- Scientific Program of the GA and for Seismology
- Any other business





Beno Gutenberg Medal 2016

The 2016 Beno Gutenberg Medal is awarded to **Roel Snieder** in recognition of his outstanding contributions to the theoretical foundations of modern methods of seismic imaging.





Prof. Roel Snieder
W.M. Keck Distinguished Professor of Basic Exploration Science
Center for Wave Phenomena
Colorado School of Mines
Golden, USA





Division Outstanding Young Scientists Award 2016

The 2016 Division Outstanding Young Scientists Award is awarded to **Joseph Doetsch** for outstanding innovative research in the area of exploration, environmental and engineering geophysics.



Dr. Joseph Doetsch ETH Zurich

Joseph Doetsch is at the forefront of the scientific field of imaging and understanding aquifer structure and processes using a variety of data sets and inversion techniques. He received his PhD from ETH Zurich only four years ago, yet his transformative research has not only resulted in many highly cited papers and numerous well-received conference contributions, but also earned him several scientific awards (like a Society of Exploration Geophysicists Honorable Mention in 2012, an **EGU Outstanding Student Poster Award in 2010**, and an European Association of Geoscientists and Engineers 'Best of Near Surface 2010' award.)





Outstanding Student Poster & Pico Award 2015

The 2015 Division Outstanding Student Poster & Pico (OSPP) Awards

Angélie Portal



Electrical resistivity tomography applied to a complex lava dome: 2D and 3D models comparison (Portal, A.; Fargier, Y.; Lénat, J.-F.; Labazuy, P.).

Elizabeth Entwistle



Constructing new seismograms from old earthquakes: Retrospective seismology at multiple length scales (Entwistle, E.; Curtis, A.; Galetti, E.; Baptie, B.; Meles, G.).





Nominations for OSPP award

Eligible for the Outstanding Student Poster and PICO (OSPP) Awards are students:

- -- who are first author & personally present the poster/PICO at the conference;
- -- who satisfy one of the following criteria:
- current undergraduate (e.g., BSc) or postgraduate (e.g., MSc, PhD) student;
- recent undergraduate or postgraduate student (conferral of degree after 1 January of the year preceding the conference)
- who are presenting their thesis work.

Each first OSPP author can register only ONE abstract (poster or PICO) for the OSPP contest





Nominations for Outstanding Young Scientists Award / Arne Richter Award for Outstanding Young Scientists

Nomination letter (1/2 page) including the division that the candidates research is most applicable to.

Curriculum Vitae. A summary of the candidate's CV (1 page) including their date of birth and the date when their highest degree qualification was received.

Selected bibliography. A list of selected publications by the candidate that best support the nomination (1/2 page). It should also state briefly the candidate's total

The whole nomination package for the Outstanding Young Scientists Award (Affect)
Richter Award for Outstanding Young Scientists must not exceed 2 page at the nomination will not be accepted.

Arne Richter Award: From all division OYSA winners for the EGU-wide Arne Richter Award, within four distinct groups [50] East Soft Lath, Planetary and Space Sciences, Interdisciplinary]





Nominations for Beno Gutenberg Medal

Nomination letter (1 page). This must clearly detail why the candidate deserves this recognition, in particular focus on the candidate's scientific contributions to the field, their importance, their impact on the discipline and their implications for the future. The new views and new insights that have been stimulated by the candidate's work are particularly relevant.

Curriculum Vitae (2 pages). A summary of the candidate's CV, including the candidate's name, address, history of employment, degrees, research experience, honours, and service to the community.

Selected bibliography (2 pages). A list of selected publications by the candidate that best support the nomination. It should also state to 10.00

best support the nomination. It should also state briefly the candidate's total of unit and types of publications and citations.

Supporting letters. Between 3 and 5 letters of support (maximum elapholistical publications) should be submitted. These letters should clearly establish in the submitted of the candidate's total of unit and types of publications and citations. contribution to the field.





Beno Gutenberg Medal – Committee for 2017

The Committee for the Beno Gutenberg Medal 2017 is composed of the last five medalists who have been awarded the Beno Gutenberg Medal

2016



Roel Snieder

2015



Göran Ekström

2014



Greg Beroza

2013



Jeroen Tromp (Chair)

2012



Michel Campillo

2017?



http://www.egu.eu/awards-medals/beno-gutenberg/

http://www.egu.eu/awards-medals/proposal-and-selection-of-candidates/





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Structure of the Seismology Division

- EGU is a bottom-up organization, and we as a division are pretty free/flexible on how to organize ourselves
- Currently (since 04/2015) we are a very "slim" division

SM Structure

| President | Paul Martin Mai | sm@egu.eu |
|-------------------------------|--------------------|---------------------------------|
| Deputy President | Charlotte Krawczyk | lotte@liag-hannover.de |
| Programme Group Chair | Paul Martin Mai | sm@egu.eu |
| Publications Committee | Charlotte Krawczyk | lotte@liag-hannover.de |
| Beno Gutenberg Medal Chair | Michel Campillo | michel.campillo@ujf-grenoble.fr |
| OSPP Coordinator | Laura Peruzza | lperuzza@inogs.it |





Structures of other Divisions

BG Structure

| President | Alina Stadnitskaia | bg@egu.eu | | | | |
|---|--|-----------------------------|--|--|--|--|
| Deputy President | Albert Bentien | albert.benthien@awi.de | | | | |
| Programme Group Chair | Alina Stadnitskaia | bg@egu.eu | | | | |
| Science Officers | - Terrestrial Biogeosciences | | | | | |
| | Caroline Slomp Marine Biogeosciences | c.p.slomp@uu.nl | | | | |
| | Christian Blodau Freshwater Biogeosciences | c.blodau@uni-muenster.de | | | | |
| | Andy Ridgwell Earth System Biogeosciences | andy.ridgwell@bristol.ac.uk | | | | |
| | _ Paleo Biogeosciences | - | | | | |
| | Helge Niemann Geomicrobiology & Extreme Environments | helge.niemann@unibas.ch | | | | |
| | - Astrobiology & Early Evolution of Life | | | | | |
| | Alina Stadnitskaia General Biogeosciences | bg@egu.eu | | | | |
| | Alina Stadnitskaia Industrial Biogeosciences & Technology | bg@egu.eu | | | | |
| Publications | Jürgen Kesselmeier | j.kesselmeier@mpic.de | | | | |
| Public Outreach & Education | Alina Stadnitskala | bg@egu.eu | | | | |
| Scientific Affairs | Alina Stadnitskaia | bg@egu.eu | | | | |
| Foreign Affairs | Alina Stadnitskala | bg@egu.eu | | | | |
| Vladimir Ivanovich Vernadsky Medal Chair | Jörn Peckmann | | | | | |

TS Structure

| President | Susanne Buiter | ts@egu.eu |
|---|----------------------------|---------------------------------|
| Deputy President | Magdalena Scheck-Wenderoth | magdalena.scheck@gfz-potsdam.de |
| Programme Group Chair | Susanne Buiter | ts@egu.eu |
| News & Media Officer | Marcel Frehner | marcel.frehner@erdw.ethz.ch |
| Division Outstanding Young Scientist Award Chair | Susanne Buiter | ts@egu.eu |
| Stephan Mueller Medal Chair | Fabrizio Storti | fabrizio.storti@unipr.it |
| OSPP Coordinator | Francesca Cifelli | francesca.cifelli@uniroma3.it |
| ECS Representative | Anne Pluymakers | a.m.h.pluymakers@fys.uio.no |
| ECS Co-Representative | João Duarte | joao.duarte@monash.edu |
| Webmaster | Marcel Frehner | marcel.frehner@erdw.ethz.ch |

TS Programme Group

| Brittle Deformation | Rüdiger Kilian | ruediger.kilian@unibas.ch |
|---|-----------------|--------------------------------|
| Ductile Deformation, Metamorphism and Magmatism | Rüdiger Kilian | ruediger.kilian@unibas.ch |
| Extensional Tectonic Settings | Rebecca Bell | rebecca.bell@imperial.ac.uk |
| Convergent Tectonic Settings | Olivier Lacombe | olivier.lacombe@upmc.fr |
| Earthquakes and Tectonics | Hiroki Sone | hiroki,sone@gfz-potsdam.de |
| Interplay between Tectonics and Surface Processes | Stéphane Bonnet | stephane.bonnet@get.obs-mip.fr |
| Methods and Techniques | Karen Leever | karen.leever@gfz-potsdam.de |
| Plate Tectonics | Susanne Buiter | ts@egu.eu |
| General Contributions | Susanne Buiter | ts@egu.eu |





Structure of the Seismology Division

- Early Career Scientists (ECS) representatives
- Science Officers
- Deputy President





Early Career Scientists representatives

- 2014 2016: Matthew Aguis
- EGU Seismology Division Blog
- EGU Seismology Division Facebook

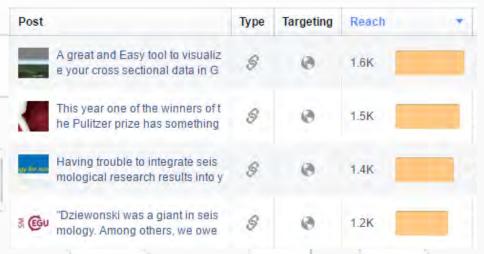






EGU Seismology Division on Facebook



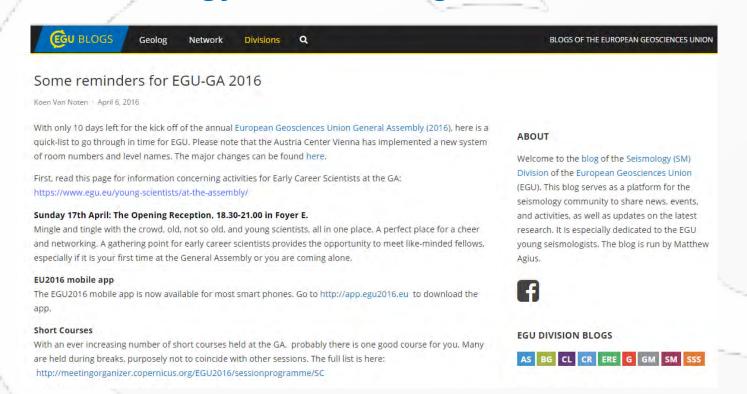


- Regular posts on conferences calls and deadlines, new catchy research results, social events, course and summer school announcements, latest earthquake news, advertising blog texts...
- 745 "likes" and rapidly increasing during EGU GA
- Administered by the ECS team
- Fast and fun
- Worldwide interest!
- Best posts reaching > 1.500 people





EGU Seismology Division Blog



- Blogs administered by EGU
- More official than facebook
- Blog texts by ECS Team and guest writers
- WE ARE LOOKING FOR GUEST WRITERS! Blog texts from seniors in Seismology would be great!





Early Career Scientists representatives

- 2016 2016: NEW The ECS Team
- Broader representation of interests, backgrounds, ideas, contacts
- Share a vision and the efforts to dive into specific areas
 - ECS Events in Seismology
 - ECS Outreach in Seismology
 - ECS Industry/Academia Relation in Seismology





Early Career Scientists representatives



Redouane Chimouni PhD Student Univ. of Algiers



Kathrin Spieker PhD Student Univ. Bergen



Lucia Gualteri
Post-doc
Lamont-Doherty Earth Obs.



Koen Van Noten Post-docs R. Obs. Belgium



Laura Ermert
PhD Student
ETH Zurich



Laura Parisi Post-doc KAUST EGU-CONTACT





Early Career Scientists – EVENT TONITE!!







- Help to define the strategy of the Division
- Help to organize sessions and events (at GA: workshops; splinter meetings etc) along a main scientific topic
- Help to coordinate sessions across the various divisions
- Help to candidates for the Division Awards
- The topics are NOT cast in stone, but can be (should be) defined by the division
- The respective science officers are voted into office by the division





- Near-Surface & Controlled-Source Seismology
- Seismic Instrumentation & Infrastructure
- Induced & Triggered Seismology
- Statistical & Real-Time Seismology
- Strong-Motion & Engineering Seismology
- Seismic & Tsunami Hazard
- Earthquake Source Processes
- Computational Seismology
- Surface-Waves & Seismic Interferometry
- Seismic Tomography & Earth Structure Imaging
- Seismotectonics & Geodynamics
- ??

- Cedric Schmelzbach, ETH Z
- Damiano Pesaresi, OGS T
- Philippe Jousset, GFZ P
- Aldo Zollo, Univ. Naples
- Fabrice Cotton, GFZ P
- ??
- ??
- Heiner Igel, LMU M
- Lapo Boschi, ISTEP P
- ??
- Susana Custodio,
- ??







Damiano Pesaresi

Experience: Mediterranean seismic Network (MedNet) field equipment coordinator, CTBTO seismic officer, Italian CTBTO NDC technical manager, OGS-CRS data acquisition coordinator, <u>CE³RN</u>, <u>SeismoSAT</u>

Expertise in: seismic networks, data acquisition, Earthquake Early Warning (EEW), CTBTO

Memberships: ORFEUS (WG2 instrumentation chairman), FDSN (WG IV CTBTO), EMSC (OGS POC), ESC (ESC GA 2016 LOC), AlpArray, EGU

Convener Seismic Networks sessions at EGU GA 2010, 2011, 2012, 2013, 2014, 2015 and 2016 and ESC GA 2010, 2012, 2014 and 2016







Lapo Boschi

Lapo Boschi (born in Bologna, Italy, in 1972) studies how waves propagate in complex media, and applies this knowledge to a number of different fields of research, within the general domains of acoustics and seismology. He is interested in wave-based imaging in geology; sound localization in acoustics; acoustic display. He teaches geology and geophysics, seismology and signal analysis, history of the earth sciences, programming and numerical modeling.

Lapo Boschi received his Ph.D. from Harvard University in 2001, after having worked for five years under the supervision of Goran Ekstrom and Adam Dziewonski. After a two-year post-doc at the university of Naples, he was for 9 years senior researcher at the ETH of Zurich. Since 2012, he holds a position of lecturer at the Institute of Earth Sciences, University Pierre and Marie Curie, Paris.





Deputy President for the Seismology Division

- Helps to define the strategy of the Division
- Helps to coordinate with Science Officers and other divisions to build a strong and coherent seismology program for the GA
- Assists the Division President, and replaces him/her if needed in official EGU matters (e.g. Council Meetings)
- Could be (should be?) the designated next Division President (to ensure smooth transition and knowledge transfer)





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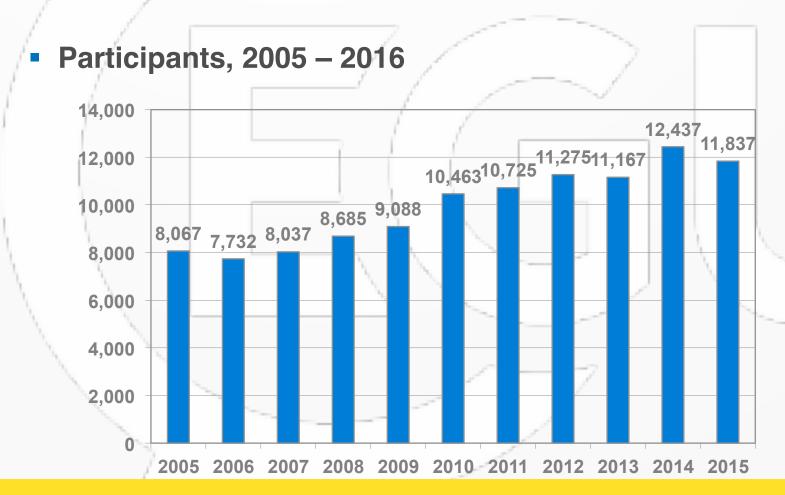


- General Assembly 2016 (as of April 14, 2016)
- 16,130 papers in programme | +13.34% (2015)
- 4,863 orals | 10,320 posters | 947 PICOs | ratio 30 / 64 / 6
- 619 unique scientific sessions | 321 side events*
- 10,988 registrations in advance (10,943 already paid) | +23.68% (2015)

^{*}Side events include: SSE (w/o US), OEM (w/o EOS), STM, FAN, AM

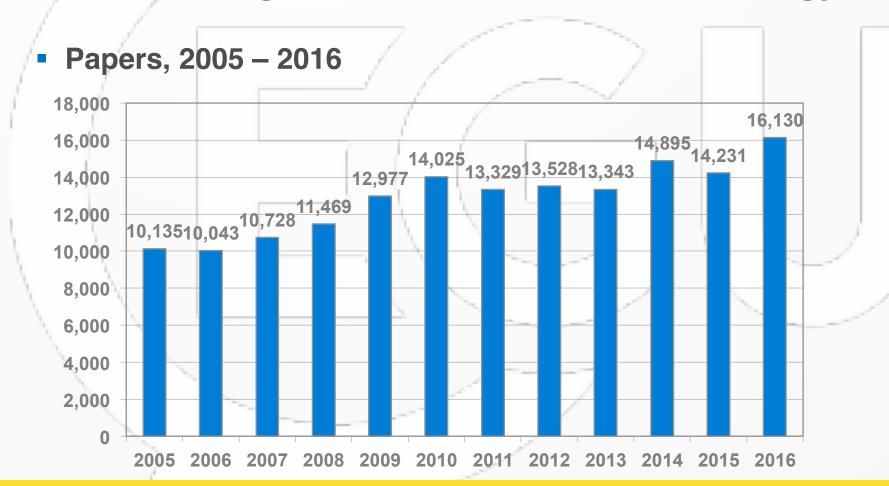






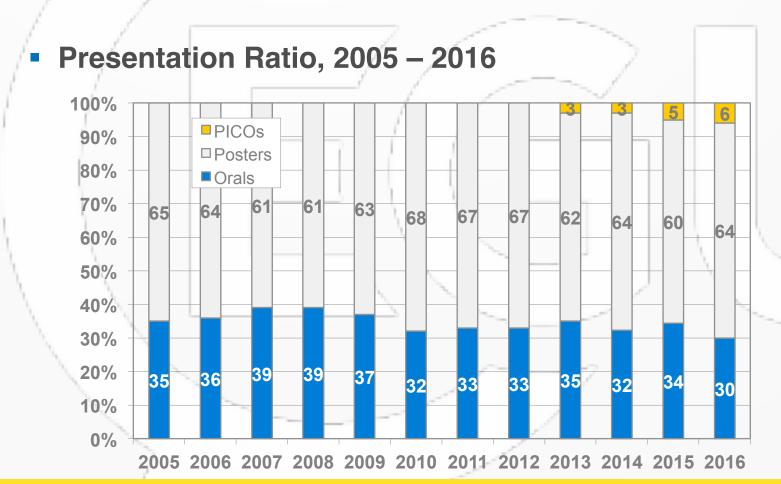
















| | Programme Group | #Abs. | sessio | | Co-org. se #Abs. | | #Abs. | | | - | | | | | | |
|------|---|--------|--------|-----|---------------------|----------|-------------|---------|--|------------------|--------------------|-------------------|------------------|-------|-------|--|
| SSE | Special scientific events | 48 | 0% | 55 | 0 | 0 | 48 | 55 | 7 | | | | | | | |
| ОЕМ | Outreach, education, and media | 265 | - | | 1 | | 1.000 | | | | | | | | | |
| STM | Short courses and topical meetings | 0 | 11 | Pr | | | | | rogramme Group | | Lead sessions | | Co-org. sessions | | | |
| FAN | Feedback and networking | 0 | | | | | | | | #Abs. | % #Ses. | #Abs. | #Ses. | #Abs. | #Ses. | |
| АМ | Administrative meetings | v | SI | v | Se | ism | olog | V | | 505 | 3% 17 | 936 | 31 | 1,441 | 48 | |
| IE | Interdisciplinary events | 478 | | | | | .0.02 | oJ. | | 505 | 3.0 17 | 330 | | 100 | | |
| AS | Atmospheric Sciences | 1,618 | 10% | 52 | 1,204 | 41 | 2,822 | 93 | | | | | | | | |
| BG | Biogeosciences | 890 | 5% | 39 | 681 | 25 | 1,571 | 64 | Programme (| roup Sta | atistics | | | | | |
| CL | Climate: Past, Present, Future | 1,343 | 8% | 45 | 886 | 31 | 2,229 | 76 | | | | | | | | |
| CR | Cryospheric Sciences | 480 | 3% | 21 | 507 | 19 | 987 | 40 | Accepted | | Total: 1,45 | 7 | | | | |
| EMRP | Earth Magnetism & Rock Physics | 267 | 2% | 12 | 560 | 19 | 827 | 31 | , attended | | 10101111111111 | | | | | |
| ERE | Energy, Resources and the Environment | 474 | 3% | 20 | 261 | 12 | 735 | 32 | Status | | Active: | 1,441 | (99%) | | | |
| ESSI | Earth & Space Science Informatics | 232 | 1% | 13 | 150 | 5 | 382 | 18 | | | Withdrawn: 16 (1%) | | | | | |
| G | Geodesy | 401 | 2% | 15 | 112 | 3 | 513 | 18 | 1 | | | | 77. 37. | | | |
| GD | Geodynamics | 432 | 3% | 17 | 601 | 19 | 1,033 | 36 | _ \ | | | | | | 200 | |
| GI | Geosciences Instrumentation & Data Systems | 264 | 2% | 14 | 357 | 17 | 621 | 31 | Granted support | Granted supports | | None: 1,437 (99%) | | | | |
| GM | Geomorpholog | 546 | 3% | 23 | 1,136 | 42 | 1,682 | 65 | | | ECSTA: 4 (0%) | | | | | |
| GMPV | Geochemist y, Mineralogy, Petrology & Volcanology | 556 | 3% | 18 | 745 | 25 | 1,301 | 43 | 4 | | | | | | | |
| HS | Hydrological Sciences | 2,221 | 13% | 80 | 1,075 | 44 | 3,296 | 124 | 1 | | | | | | - | |
| NH | Nati ral Hazards | 1,248 | 7% | 44 | 1,287 | 44 | 2,535 | 88 | Presentation req | uests | Oral prefer | rence: | 724 (509 | 6) | | |
| NP | Nonlinear Processes in Geosciences | 352 | 2% | 16 | 189 | 11 | 541 | 27 | | | PICO: | | 3 (09 | 41 | | |
| os | Ocean Sciences | 451 | 3% | 14 | 744 | 26 | 1,195 | 40 | 113000 | | PICO. | | 3 (09 | 0) | | |
| P's | Planetary & Solar System Sciences | 431 | 3% | 16 | 301 | 12 | 732 | 28 | | | Poster | , j i | 714 (400 | ۷) | | |
| SM | Seismology | 505 | 3% | 17 | 936 | 31 | 1,441 | 48 | | | preference | : | 714 (499 | 0) | | |
| SSP | Stratigraphy, Sedimentology & Palaeontology | 548 | 3% | 19 | 258 | 10 | 806 | 29 | | | 1- 0 | | | | | |
| SSS | Soil System Sciences | 1,450 | 9% | 53 | 1,187 | 61 | 2,637 | 114 | - Charles and the Control of the Con | | | MILLION . | | | | |
| ST | Solar-Terrestrial Sciences | 534 | 3% | 18 | 159 | 6 | 693 | 24 | Author identifica | tion | ECS: 650 | (45%) | | | | |
| TS | Tectonics & Structural Geology | 754 | 4% | 23 | 604 | 24 | 1,358 | 47 | specifics | | | | | | | |
| Sum | | 16,788 | 100% | 891 | Las | t update | : 28.02., 2 | 1:34:16 | | | | | | | | |





| | Bushing Colons | Lead | Co-org. s | Total | | | | |
|----|-----------------|-------|-----------|-------|-------|-------|-------|------|
| | Programme Group | #Abs. | % | #Ses. | #Abs. | #Ses. | #Abs. | #Ses |
| SM | Seismology | 505 | 3% | 17 | 936 | 31 | 1,441 | 48 |

- SM1 General Seismology Sessions
- SM2 Earthquake Sources & Earthquake Engineering
- SM3 Seismic Hazard & Earthquake Predictability
- SM4 Seismic Tomography
- SM5 Near-surface and Controlled-source Seismology
- SM6 Seismotectonics & Geodynamics
- SM7 Seismic Infrastructures & Software
- SM8 Co-organized Sessions





- The meeting is increasing continuously, in number of people and abstracts, but the venue is fixed in size
- Scheduling will be increasingly difficult, and fragmentation for small sessions is likely to increase; in 2016, 22 abstracts were needed for an oral block, in 2017? 25?
- Small sessions are likely to be merged, or poster only
- Do we as a division want to make an effort to grow, and to try to avoid 'fragmentation'?
- The skeleton program for GA17 will be developed until 09/16





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EGU Galileo Conferences

Purpose of Galileo conferences:

- Bring together up to 100 participants for a 3-5 days meeting to discuss a well-focused cutting-edge topic at the frontier of geosciences research in a stimulating environment.
- Possibility to publish a special Galileo Conference proceeding issue in one of the EGU journals

Support:

- EGU is putting at disposal the conference organization tools; web hosting, abstract, programme and registration management.
- EGU provides comprehensive organisational support by organizing e.g. venue, poster boards, catering, Wi-Fi facilities, etc. Thereby the organising committee can fully focus on the scientific aspects of the conference.
- Support for Early Career Scientists (up to 5000€)
- EGU is covering a potential deficit of the event.

www.egu.eu/meetings/galileo-conferences/





EGU Admin / Structure / Finances

- Many details were discussed in the Plenary (Monday)
- Transition from EGU France to EGU e.V. (Germany) on its way; EGU G.m.b.H runs journals etc.
- Financial situation of EGU stable, but heavily subsidizing EGU journals (i.e. waiving page charges) generates a deficit that will be compensated by 2017
- More questions: ask me or browse EGU website





Final remarks

- Don't forget the deadlines for award nominations: June 15!
- Planning for the GA17 begins in summer, until mid Sept!
- Engage with the ECS-reps; write for the Seismo-Blog!
- Enjoy the rest of the meeting!

contact to discuss division matters

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! the division lives from y/our initiatives !